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EXAMINER	
KWIECINSKI, RYAN D	

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3635	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/770,251	HALLIDAY, MICHAEL J.	
	Examiner	Art Unit	
	RYAN D. KWIECINSKI	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7,8,10-18 and 21-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7,8,10-18 and 21-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 10-11, 16-17, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,306,769 to Martinet.

Claim 1:

Martinet discloses a skylight system comprising:

a tapered light tube (10, Fig.1) comprising a top (14, Fig.1) and a bottom (26, Fig.1);

said tapered light tube wider at said top than at said bottom (Fig.1).

Claim 7:

Martinet discloses the skylight system of claim 1 wherein said diffuser comprises complete diffusion (Column 4, lines 35-40) on its interior.

The diffuser is made out of frosted glass so it will naturally diffuse light.

Claim 10:

Martinet discloses the skylight system of claim 39 further comprising a done at said top wherein said tapered light tube is sealed (Column 3, lines 15-20, cap is affixed to tube) to said top dome and said tapered light tube is sealed to said bottom diffuser (Column 4, lines 35-40, diffuser cap covers bottom of tube), resulting in a completely sealed skylight.

Claim 11:

Martinet discloses the skylight system of claim 10 wherein each of said dome, said tapered tube and said bottom diffuser are stackable during shipping and storage with other similar components (tapered tubes and rounded caps will allow the elements to be stacked).

Claim 16:

Martinet discloses the skylight system of claim 1 wherein said light tube further comprises a reflective interior (Column 3, lines 22-23).

Claim 17:

Martinet discloses the skylight system of claim 1 wherein a back of said top of said light tube is higher than a front of said top of said light tube (Fig.1).

Claim 38:

Martinet discloses the skylight system of claim 1 further comprising a dome at said top (22, Fig.1).

Claim 39:

Martinet discloses the skylight system of claim 1 further comprising a diffuser (30, Fig.1) at said bottom.

Claim 40:

Martinet discloses the skylight system of claim 1 wherein said light tube comprises a structural material (Column 3, lines 23-26, formed from metal) configured to serve as flashing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18, 22, 28-29, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet.

Claim 18:

Martinet discloses a skylight system comprising:

a light tube comprising a structural material configured to serve as a flashing;

a dome disposed at and sealed at a top of said light tube; and

a diffuser disposed at a bottom of said light tube.

Martinet does not directly disclose the diffuser and the dome forming a permanent seal with the light tube.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have permanently sealed the diffuser and the dome to the light tube in order to seal off the skylight system and prevent unwanted moisture, dust, and insects from entering the skylight system. Using sealers on mating parts of a structure is notoriously well known in the art.

Claim 22:

Martinet discloses the skylight system of claim 18 wherein said bottom diffuser comprises complete diffusion (Column 4, lines 35-40; frosted glass) on its interior.

Claim 28:

Martinet discloses the skylight system of claim 1 wherein said light tube further comprises a reflective interior (Column 3, lines 22-23).

Claim 29:

Martinet discloses the skylight system of claim 1 wherein a back of said top of said light tube is higher than a front of said top of said light tube (Fig.1).

Claim 43:

Martinet discloses the skylight system of claim 18 wherein said light tube comprises a structural material configured to serve as flashing (Column 3, lines 23-26, formed from metal).

Claims 3-5, 21, 30-32, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet in view of USPN 2,858,734 to Boyd.

Claim 3:

Martinet discloses the skylight system of claim 38, but does not disclose said dome comprises a diffused dome.

Boyd discloses said dome (23, Fig.1) is a diffused dome (Column 3, lines 5-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created the top dome of Martinet out of a material with a surface pattern that would cause the dome to completely diffuse light into the tube taught by Boyd, directing the light down the tube. The diffused dome

enhances the overall performance of the skylight causing more light to enter the room being illuminated below.

Claim 4:

Martinet in view of Boyd discloses the skylight system of claim 3, Boyd also discloses said dome comprises a completely diffused dome (prisms, 28, cover the whole surface, Fig.1) on its interior.

Claim 5:

Martinet discloses the skylight system of claim 1, but does not disclose wherein said diffused dome comprises a prismatic diffuser.

Boyd disclose said dome comprises a prismatic diffuser (Column 3, lines 5-7)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created a top dome of the skylight system of Martinet including a prismatic diffuser taught by Boyd, which scatters the light into the tube at angles causing the light to continue down the light tube. Using a diffuser is an idea well known in the art of skylights and lights in general.

Claim 21:

Martinet discloses the skylight of claim 18, but does not disclose wherein said diffused dome comprises a prismatic diffuser,

Boyd disclose said dome comprises a prismatic diffuser (Column 3, lines 5-7)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created a top dome of the skylight system of Martinet including a prismatic diffuser taught by Boyd, which scatters the light into the tube at angles causing the light to continue down the light tube. Using a diffuser is an idea well known in the art of skylights and lights in general.

Claim 30:

Martinet discloses a method of assembly of a skylight system on a roof comprising the steps of:

providing a skylight system comprising a light tube (10, Fig.1) with a top (14, Fig.1) and a bottom (26, Fig.1);

disposing a diffuser (30, Fig.1) to the light tube at the bottom of the light tube;

cutting a hole in the roof (hole in which the skylight in placed in Fig.1);

lowering the skylight system through the hole in the roof (the bottom end is skinnier so the skylight just be lowered into the hole);

Martinet does not disclose the dome being completely diffused.

Boyd discloses a completely diffused (prisms, 28, span along the entire surface of 23, Fig.1) dome (23, Fig.1) atop the light tube.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the skylight system of Martinet with a

completely diffused dome taught by Boyd. A completely diffused dome will direct more sunlight down the tube causing enhanced illumination of the room below the tube.

Claim 31:

Martinet in view of Boyd discloses the method of claim 30, Martinet also discloses wherein the step of providing the light tube comprises providing a tapered tube (10, Fig.1) with the top of the tapered light tube being wider (14, Fig.1) than the bottom of the light tube (26, Fig.1); and

wherein the step of lowering the skylight through the roof comprises lowering the skylight system until the roof stops the tapered light tube (taper stops the light tube from going any farther into the roof, Fig.1) at the portion where the light tube taper is the same size as the roof hole.

Claims 32:

Martinet in view of Boyd discloses the method of claim 30, but does not directly disclose wherein the step of disposing a diffuser to the light tube comprises permanently sealing the diffuser to the light tube; and

wherein the step of disposing a dome atop the light tube comprises permanently sealing the done atop the light tube;

resulting in a permanently sealed skylight system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have permanently sealed the diffuser and the dome to the light tube in order to seal off the skylight system and prevent unwanted moisture,

dust, and insects from entering the skylight system. Using sealers on mating parts of a structure is notoriously well known in the art.

Claims 41-42:

Martinet discloses the skylight system of claim 18, but does not disclose said dome comprises a diffused done nor does he disclose said dome comprises a completely diffused done on its interior.

Boyd discloses said dome (23, Fig.1) is a diffused dome (Column 3, lines 5-7).

Boyd also discloses said dome comprises a completely diffused dome (prisms, 28, cover the whole surface, Fig.1) on its interior.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created the top dome of Martinet out of a material with a surface pattern that would cause the dome to completely diffuse light into the tube taught by Boyd, directing the light down the tube. The diffused dome enhances the overall performance of the skylight causing more light to enter the room being illuminated below.

Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,307,769 to Martinet in view of Publication No. US 2003/0066254 A1 to DeBlock.

Claim 8:

Martinet in view of Boyd discloses the method of claim 30, teaches the skylight system of claim 6, but does not teach wherein said bottom diffuser comprises a prismatic diffuser.

DeBlock teaches wherein said bottom diffuser comprises a prismatic diffuser (Page 1, paragraph 16, line 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the bottom diffuser with a prismatic diffuser taught by DeBlock to better enhance the scattering of the light into the room into which the skylight directs the sunlight. Prismatic diffusers are very well known in the art and would have been an obvious application in Martinet's skylight system.

Claim 23:

Martinet discloses the skylight system of claim 18, but does not disclose wherein the bottom diffuser is a prismatic diffuser.

DeBlock discloses wherein said bottom diffuser comprises a prismatic diffuser (Page 1, paragraph 16, line 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the bottom diffuser with a prismatic diffuser taught by DeBlock to better enhance the scattering of the light into the room into which the skylight directs the sunlight. Prismatic diffusers are very well

known in the art and would have been an obvious application in Martinet's skylight system.

Claims 12, 15, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet in view of USPN 5,596,848 to Lynch.

Claims 12, 15, 24, and 26:

Martinet discloses the skylight system of claims 38 and 18, but he does not disclose wherein said top dome comprises a notch system and said tapered light tube is disposed within said notch system per claims 12 and 24 or wherein the notch system further comprises a gasket per claims 15 and 26.

Lynch teaches wherein said top dome comprises a notch system (30,37, Fig.4) and said tapered light tube is disposed within said notch system per claim 12 or wherein the notch system further comprises a gasket (36, Fig.6) per claim 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a notch system on the bottom of the dome, which mates with the top of the tapered tube and creates a more secure connection and seal between the two. It is also obvious to include a gasket in this notch system to seal the opening between the dome and the tube. The use

of mating edges, such as a notch and a lip, as well as gaskets to seal the mating edges are two extremely well known practices.

Claims 13-14, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet in view of USPN 5,896,713 to Chao et al.

Claim 13, 14, 25, and 27:

Martinet discloses the skylight system of claim 39, but he does not disclose wherein said bottom diffuser comprises a notch system and said tapered light tube is disposed within said notch system per claims 13 and 25 or wherein the notch system further comprises a gasket per claims 14 and 27.

Chao et al. teaches wherein said bottom diffuser comprises a notch system (26, Fig.5) and said tapered light tube is disposed within said notch system per claim 13 or wherein the notch system further comprises a gasket (94, Fig.5) per claim 14.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a notch system on the top of the bottom diffuser, which mates with the bottom of the tapered tube and creates a more secure connection and seal between the two. It is also obvious to include a gasket in this notch system to seal the opening between the bottom diffuser and

the tube. The use of mating edges, such as a notch and a lip, as well as gaskets to seal the mating edges are two extremely well known practices.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet in view of US 2,858,734 to Boyd in view of USPN 5,596,848 to Lynch.

Claim 33:

Martinet in view of Boyd discloses the method of claim 30, but does not disclose wherein the step of disposing the dome atop the light tube comprises providing a dome with a notch system and disposing the light tube with the notch system.

Lynch discloses wherein said top dome comprises a notch system (30,37, Fig.4) and said tapered light tube is disposed within said notch system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a notch system taught by Lynch on the bottom of the dome of Martinet's skylight system, which mated with the top of the tapered tube, creating a more secure connection and seal between the two. It is also obvious to take the step of disposing the tube within the notch system in order to secure the connection. The use of mating edges, such as a notch and a lip, as well as gaskets to seal the mating edges are two extremely well known practices.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet in view of USPN 2,858,734 to Boyd in view of USPN 5,896,713 to Chao et al.

Claim 34:

Martinet in view of Boyd discloses the method of claim 30, but does not disclose wherein the step of disposing the diffuser at the bottom of the light tube comprises providing a diffuser with a notch system and disposing the light tube within the notch system.

Chao et al. discloses wherein said top dome comprises a notch system (26,Fig.5) and said tapered light tube is disposed within said notch system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a notch system taught by Chao et al. on the bottom of the dome of Martinet's skylight system, which mated with the top of the tapered tube, creating a more secure connection and seal between the two. It is also obvious to take the step of disposing the tube within the notch system in order to secure the connection. The use of mating edges, such as a notch and a lip, as well as gaskets to seal the mating edges are two extremely well known practices.

Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 in view of USPN 6,351,923 B1 to Peterson.

Claim 35:

Martinet discloses the skylight system of claim 10, but does not disclose said light tube includes a desiccant or an inert gas disposed therein.

Peterson discloses a desiccant (42, Fig.2) and an inert gas (Column 1, lines 27-30) disposed therein.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the skylight system of Martinet including a desiccant and an inert gas disposed within the tube of the skylight taught by Peterson. Desiccants are notoriously well known in the art to be used to reduce the amount of moisture build up in sealed of spaces. The desiccant will prevent condensation from developing inside of the skylight tube due to the change in temperature of the gas inside of the tube. Inert gases increase the insulation of the skylight system reducing the heat flow through the system, in turn reducing heat loss from the building that the skylight system is installed.

Claim 36:

Martinet discloses the skylight system of claim 10, but does not disclose said light tube includes a desiccant or an inert gas disposed therein.

Peterson discloses a desiccant (42, Fig.2) and an inert gas (Column 1, lines 27-30) disposed therein.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the skylight system of Martinet including a desiccant and an inert gas disposed within the tube of the skylight taught by Peterson. Desiccants are notoriously well known in the art to be used to reduce the amount of moisture build up in sealed of spaces. The desiccant will prevent condensation from developing inside of the skylight tube due to the change in temperature of the gas inside of the tube. Inert gases increase the insulation of the skylight system reducing the heat flow through the system, in turn reducing heat loss from the building that the skylight system is installed.

Claims 37 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,306,769 to Martinet in view of USPN 2,858,734 to Boyd in view of US 2003/0066254 A1 to DeBlock

Claim 37:

Martinet in view of Boyd discloses the method of claim 30, but does not disclose a step of adhering light tube to the roof.

DeBlock discloses a step of adhering (Page 1, Paragraph [0020]; used adhesives to secure the flashing to roof) the light tube to said roof.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have secured Martinet's skylight system to the roof using adhesives taught by DeBlock Adhesives would secure and seal the skylight to

the roof structure, preventing external elements from traveling between the roof and the skylight. Although DeBlock does not use the adhesives on the light tube, he does disclose that adhesives are a suitable secure/sealing means for metal structure in roofing applications.

Claim 44:

Martinet in view of Boyd discloses the method of claim 30, but they do not disclose the step of sealing the hole without using roof flashing.

DeBlock discloses a step of adhering (Page 1, Paragraph [0020],) the light tube to said roof.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have secured Martinet's skylight system to the roof using adhesives taught by DeBlock. Adhesives would secure and seal the skylight to the roof structure, preventing external elements from traveling between the roof and the skylight. Although DeBlock does not use the adhesives on the light tube, he does disclose that adhesives are a suitable secure/sealing means for metal structure in roofing applications.

Response to Amendment

The affidavit filed on 31 January 2008 under 37 CFR 1.131 is sufficient to overcome the Bracale reference.

Response to Arguments

Applicant's arguments, see pages 2-3 and Exhibit A, filed 31 January 2008, with respect to the rejection(s) of claim(s) 1, 18, and 30 under USC 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US 4,306,769 to Martinet.

Martinet discloses a tapered tube skylight system inserted into a hole in the roof.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDK

/Ryan D Kwiecinski/
Examiner, Art Unit 3635

/Robert J Canfield/

Supervisory Patent Examiner, Art Unit 3635